



SAXITOXIN

Agent Overview:

Saxitoxin is a potent biological toxin produced by certain species of dinoflagellates. Ingesting contaminated shellfish can result in paralytic shellfish poisoning (PSP) syndrome. Oral ingestion may numb the oral mucosa within 30 minutes. Signs and symptoms typically progress rapidly in severe poisoning, including parasthesias, (a skin sensation, such as burning, prickling, itching, or tingling, with no apparent physical cause), a floating sensation, muscle weakness, vertigo, and cranial nerve dysfunction. In untreated cases, respiratory failure and death may occur from paralysis within 2-12 hours. Timely mechanical artificial respiration is essential. There is no cure; however, most human intoxications are non-lethal. LRN Reference Laboratories can assess urinary saxitoxin. Some commercial laboratories can detect saxitoxin in ingested compounds, in seafood or in other environmental samples.

Lab Specimen Submittal:

Authorization by Dr. Jane Getchell, Director DPHL; Christina Pleasanton, Deputy Director DPHL; or Tara Lydick, Chemical Terrorism Coordinator.

Type of Specimens

Urine: 25mL-50mL screw-cap container

Necessary for Testing:

Whole blood:

- Three, 5 or 7 mL purple-top (EDTA) tubes (vacuum fill only) AND
- One, 5 or 7 mL gray-top or green-top (vacuum fill only) AND
- Two empty urine cups and two empty blood tubes for each lot # submitted.

Packaging Instructions:

Urine: freeze specimen upon collection and ship on dry ice; label specimens and package individually; wrap with absorbent material.

Whole blood: place filled tubes in a shipping rack for stability, wrap the tubes in absorbent material, and secure with tape. Place the packaged tubes in a secondary unbreakable container. Specimens may be shipped cold but *must not* be frozen.

All: wrap sample containers and layers with tamper-proof, waterproof forensic evidence tape initialed by collector, being careful not to cover the sample labels. Ship to DPHL as Biological Substance, Category B (Packing Instruction 650).

Receiving Specimens at DPHL:

Authorized specimens are received at the lab's rear (loading dock) entrance. Submitters must present ID and complete proper forms.

Handling of Specimens:

Follow chain of custody procedures. Freeze urine specimens.

Reporting Results:

Reference laboratory will notify DPHL as soon as possible. The Potential Exposure Call Log and Information form will provide information for notification of testing results outside of the DPHL.

Contact Information:

Jane Getchell, DrPH, Director DPHL, 302-223-1520 (24/7 coverage)

24/7 Emergency Contact Number: 1-888-295-5156

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